



State of Illinois
ENVIRONMENTAL PROTECTION AGENCY
MEMORANDUM

DATE: October 14, 2010
TO: Division Files - Bureau of Land
FROM: Chris Cahnovsky – Collinsville Region
SUBJECT: 1198010003 – Madison County
Estate of Chemetco
FOS File

On October 14, 2010, I conducted an inspection at Chemetco, Inc. Present during this inspection were Jorge Garcia, ES&H Manager for the Estate of Chemetco and Mike Murray of AIS.

DOMES BUILDING

Stainless steel that was sent to a Chicago scrap dealer was returned because it had too much lead residue adhering to the surface. Mr. Garcia and Mr. Murray could not remember the name of the scrap dealer that rejected the scrap. The scrap rejected contained about 6% lead. The scrap company wants the stainless steel to contain 0% lead. Three companies have been on-site to demonstrate different cleaning techniques to remove the lead from the surface. Currently the only method that has worked is high pressure water and using a hand grinder to grind away the surface layer of the steel. On October 29, 2010 I returned to the site and spoke with Jorge Garcia. According to Mr. Garcia, the method that AIS wants to use to clean the steel is a combined high pressure water and sand mixture. He estimated that AIS will generate between 2 – 20 pounds of spent sand per minute or about 4.8 tons per day. I explained that the spent sand is a solid waste and at least a special waste. A representative sample would need to be collected of the spent sand and tested for TCLP metals. The sand will most likely be a hazardous waste.

FINES BUILDING

I then inspected the Fines Building. It appeared that two additional loads of fines from the tank house have been moved to the Fines Building. The pile of concrete and debris is still in the Fines Building. Mr. Garcia is waiting for approval to take a sample for waste profiling.

AAF DEMOLITION

AIS has begun the demolition of the AAF area. Small sections of pipe are being crimped to prevent dust from dropping to the ground. The pipe is then emptied and the fines are taken to the Fines Building. The scrap is being cut into five foot sections to meet the scrappers specification. The stainless steel is being stockpiled prior to being moved to the Dome Building for decon. The other steel is being directly sent to Grossman Metals.

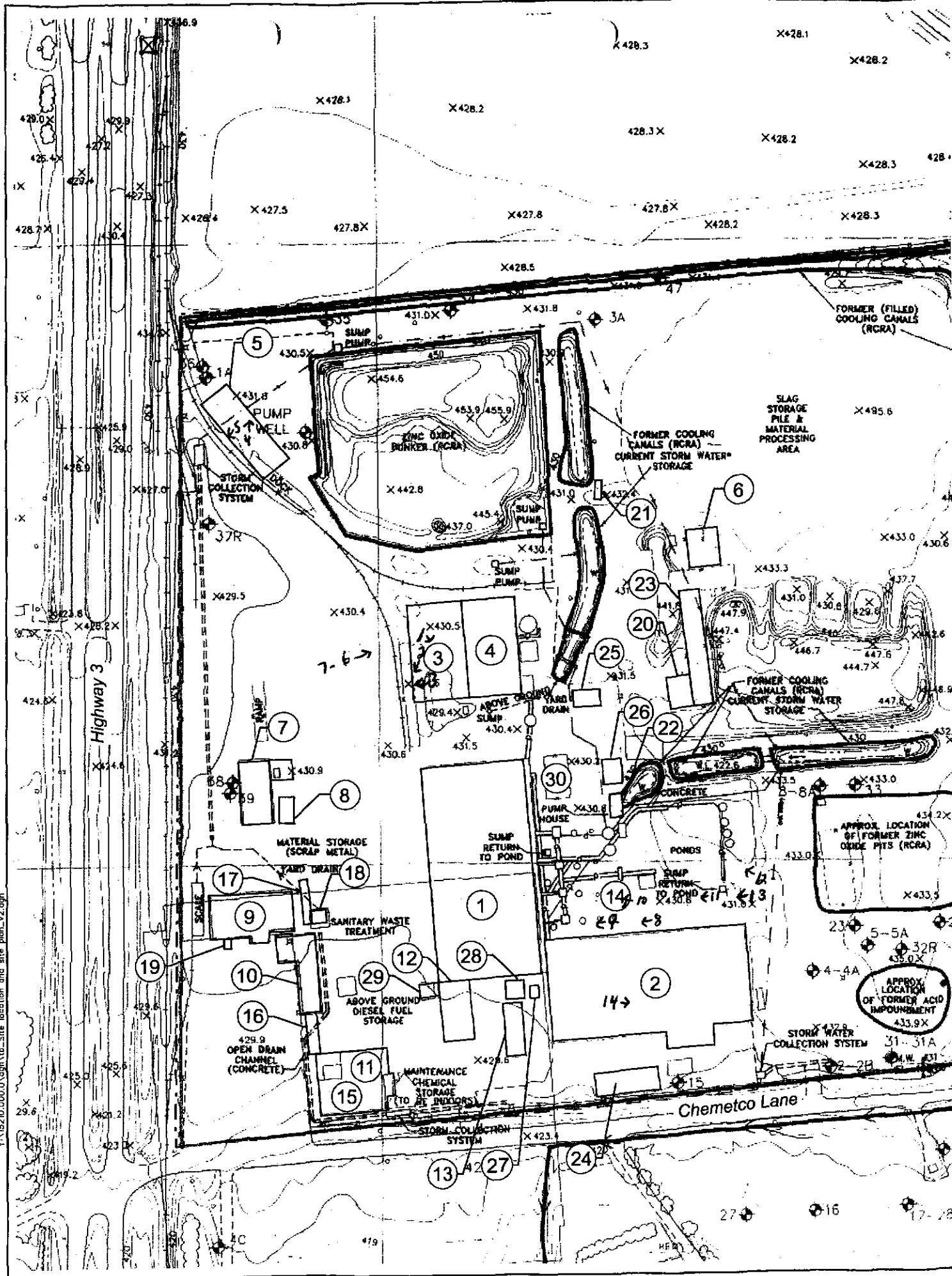
PILOT PLANT

I met with Mike Smallwood during this inspection. Mr. Smallwood gave me a tour of the Paradigm metal treatment pilot plant. The pilot plant was not in operation during this inspection. Per Mr. Smallwood he has completed all the test runs he needs. I observed a one cubic yard box of fines in front of the plant. This box contained pilot plant feedstock slag and zinc oxide fines that were ground by Hazen Research, Inc. I also observed a 275-gallon tote that contained about 50 gallons of blue water. According to Mr. Smallwood he is waiting for more solids to settle out of the water before taking it to the lab. I observed that some of the columns of the pilot plant contained sediment and liquid. Per Mr. Smallwood these are metals that have separated during treatment. Mr. Smallwood showed me an area in the Brick Shop where Paradigm is planning to build a portable 50 ton per day treatment plant. This plant will operate until they are ready to go full scale in the Tank House.

I was then given a tour of the lab. I was shown some of the materials generated from the pilot process. One was a blue crystal that appeared to be copper sulfate. This appears to be the main product produced so far. I was showed other beakers of materials but it was difficult to understand from Mr. Smallwood what was in the beakers. I explained to Mr. Smallwood that the IEPA and USEPA were looking for a results report from the pilot study. He was not aware that we were asking for this information.

CNC

cc: Regional Files
cc: Erin Rednour
cc: Michelle Kerr - USEPA





DIGITAL PHOTOGRAPHS

File Names: 1198010003 ~ 1042010-[Exp. #001-014].jpg



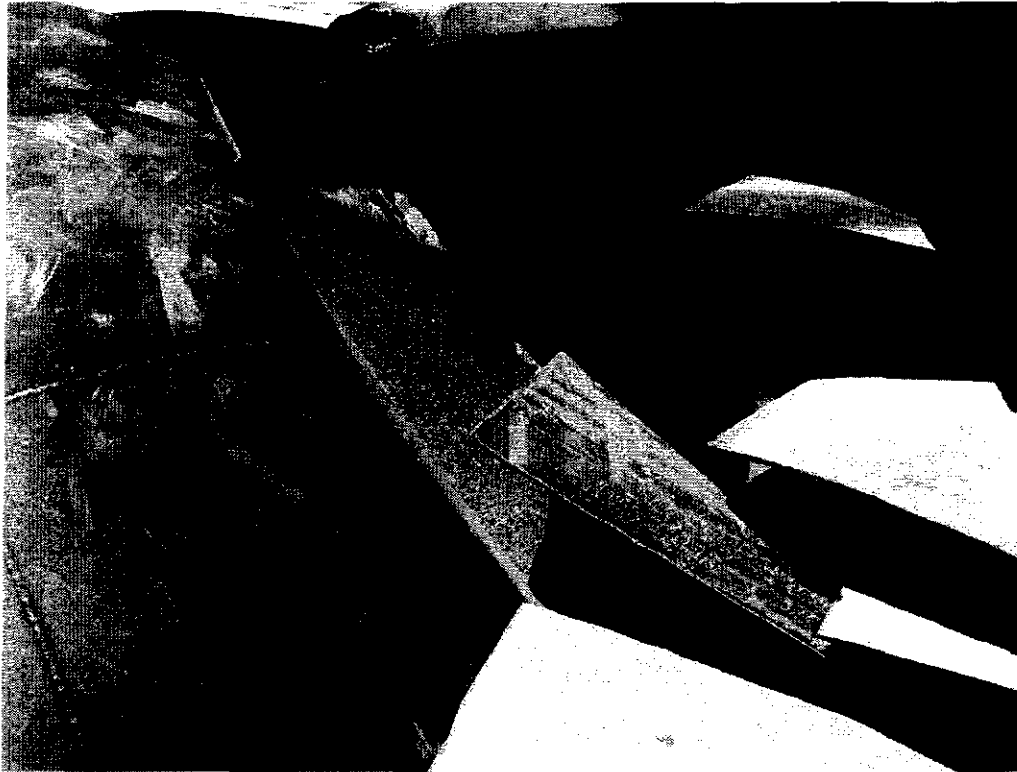
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Photo by: Chris
Cahnovsky
Exposure #: 001
Comments:



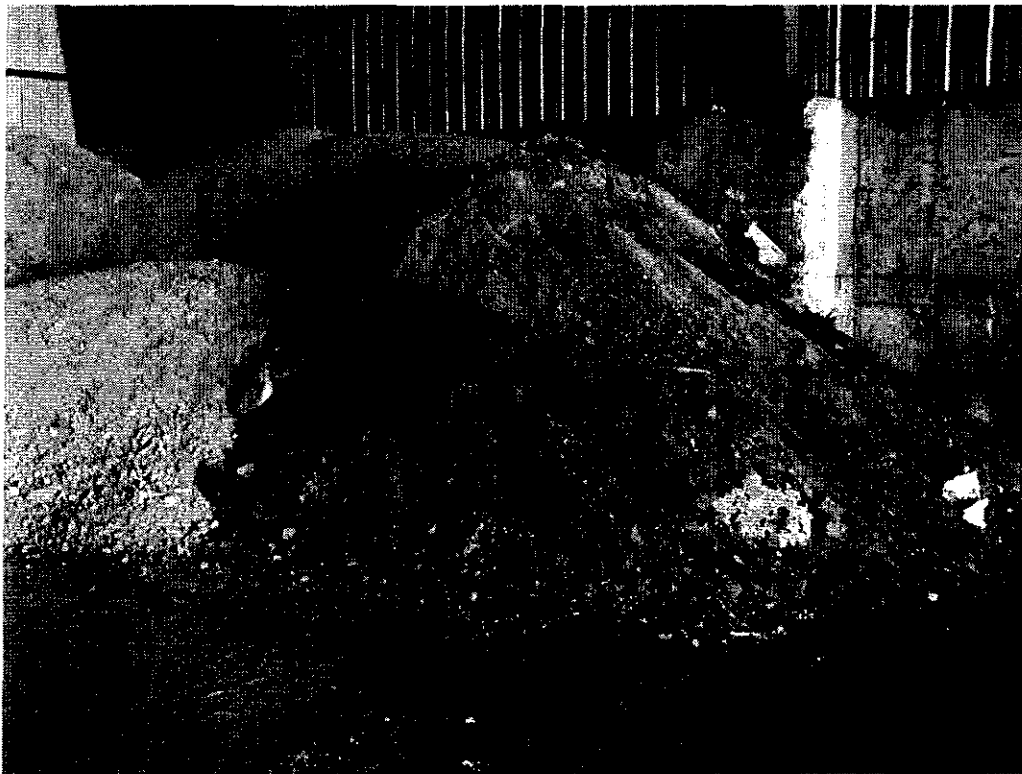
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Time: 2:00 – 3:45
Direction: South
Photo by: Chris
Cahnovsky
Exposure #: 002
Comments: Stainless
steel that needs to be
washed in the Dome
Building



DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1042010-[Exp. #001-014].jpg



Date: 10/14/2010
Time: 2:00 – 3:45
Direction: East
Photo by: Chris
Cahnovsky
Exposure #: 003
Comments: Stainless
steel that needs to
be washed in the
Dome Building



Date: 10/14/2010
Time: 2:00 – 3:45
Direction: Northwest
Photo by: Chris
Cahnovsky
Exposure #: 004
Comments: Fines from
Tank House in Fines
Building



DIGITAL PHOTOGRAPHS

File Names: 1198010003 ~ 1042010-[Exp. #001-014].jpg



Date: 10/14/2010
Time: 2:00 – 3:45
Direction: Southeast
Photo by: Chris
Cahnovsky
Exposure #: 005
Comments: Fines from
Tank House in Fines
Building



Date: 10/14/2010
Time: 2:00 – 3:45
Direction: East
Photo by: Chris
Cahnovsky
Exposure #: 006
Comments: Stainless
steel rejected from
metals buyer due to
high lead content



DIGITAL PHOTOGRAPHS

File Names: 1198010003 ~ 1042010-[Exp. #001-014].jpg



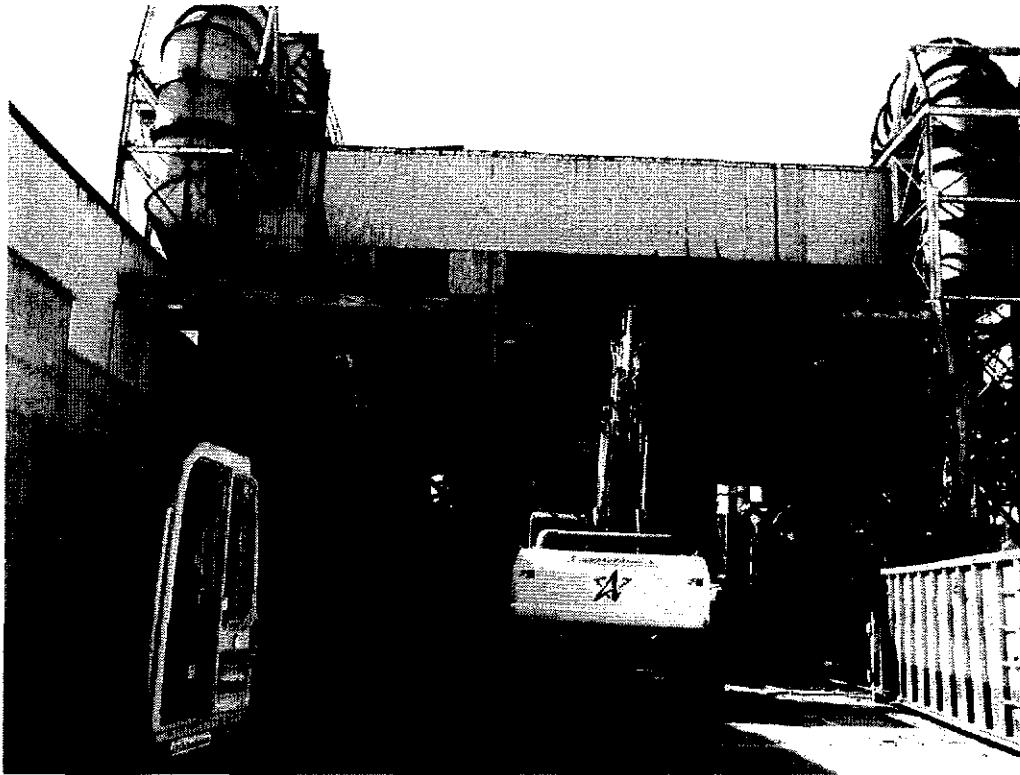
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Photo by: Chris
Cahnovsky
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Comments: Stainless
steel rejected from
metals buyer due to
high lead content



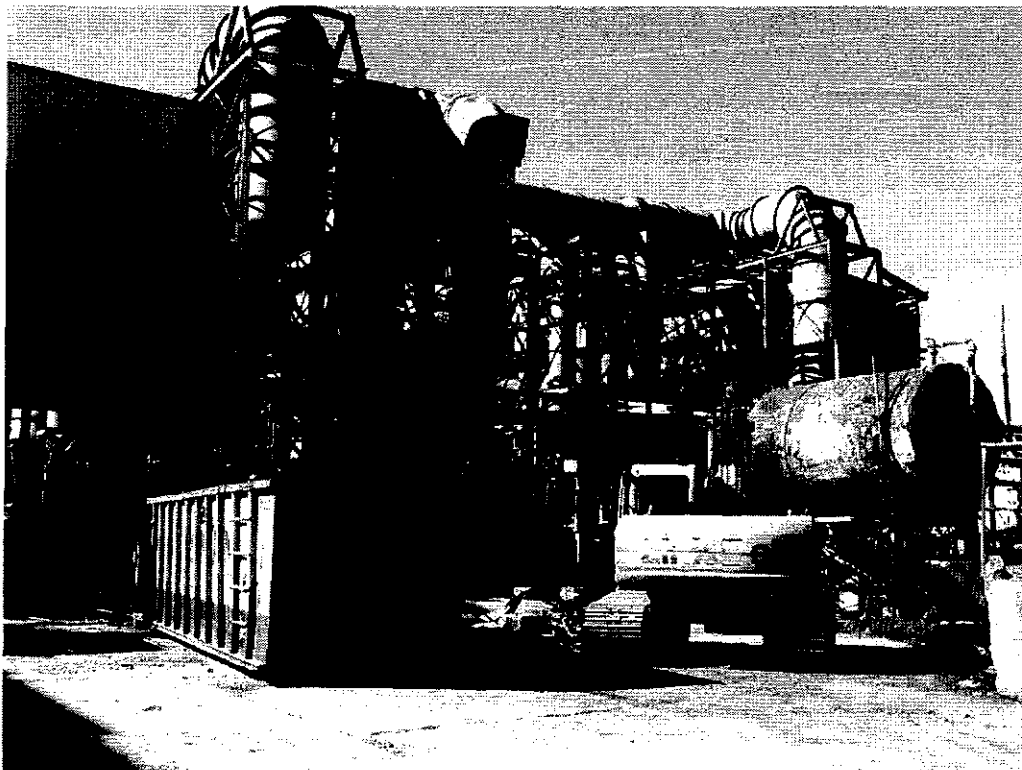
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Cahnovsky
Exposure #: 008
Comments:



DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1042010-[Exp. #001-014].jpg



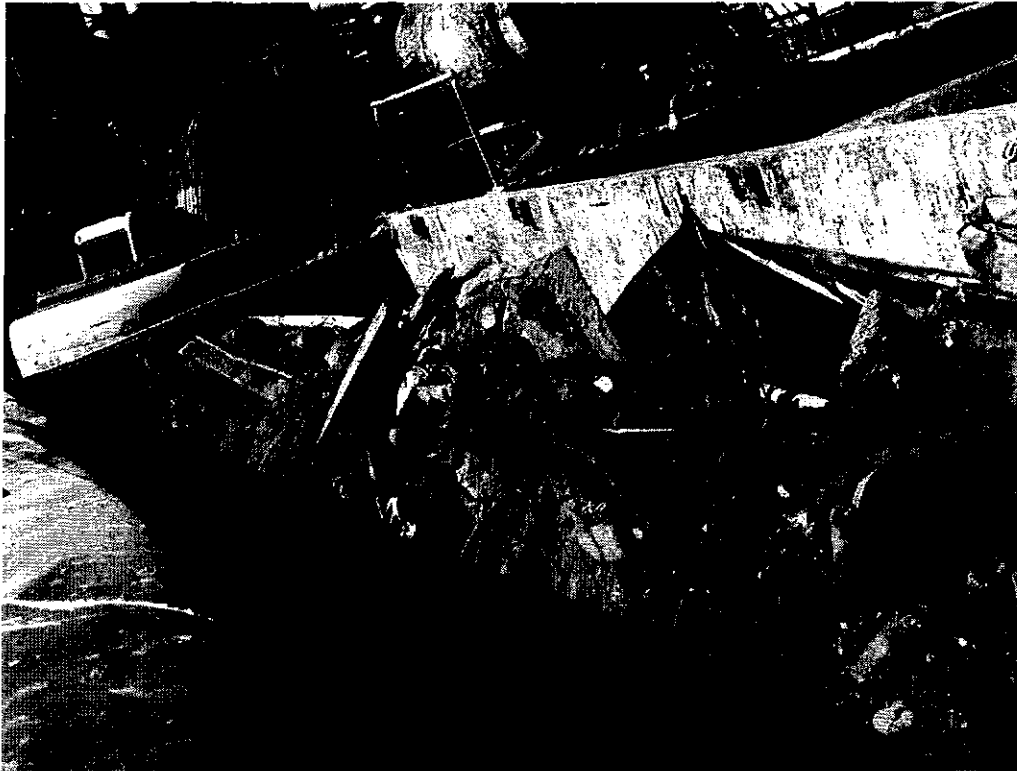
Date: 10/14/2010
Time: 2:00 – 3:45
Direction: West
Photo by: Chris
Cahnovsky
Exposure #: 009
Comments: AAF
Demolition



Date: 10/14/2010
Time: 2:00 – 3:45
Direction: Northwest
Photo by: Chris
Cahnovsky
Exposure #: 010
Comments: AAF
Demolition



DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1042010-[Exp. #001-014].jpg



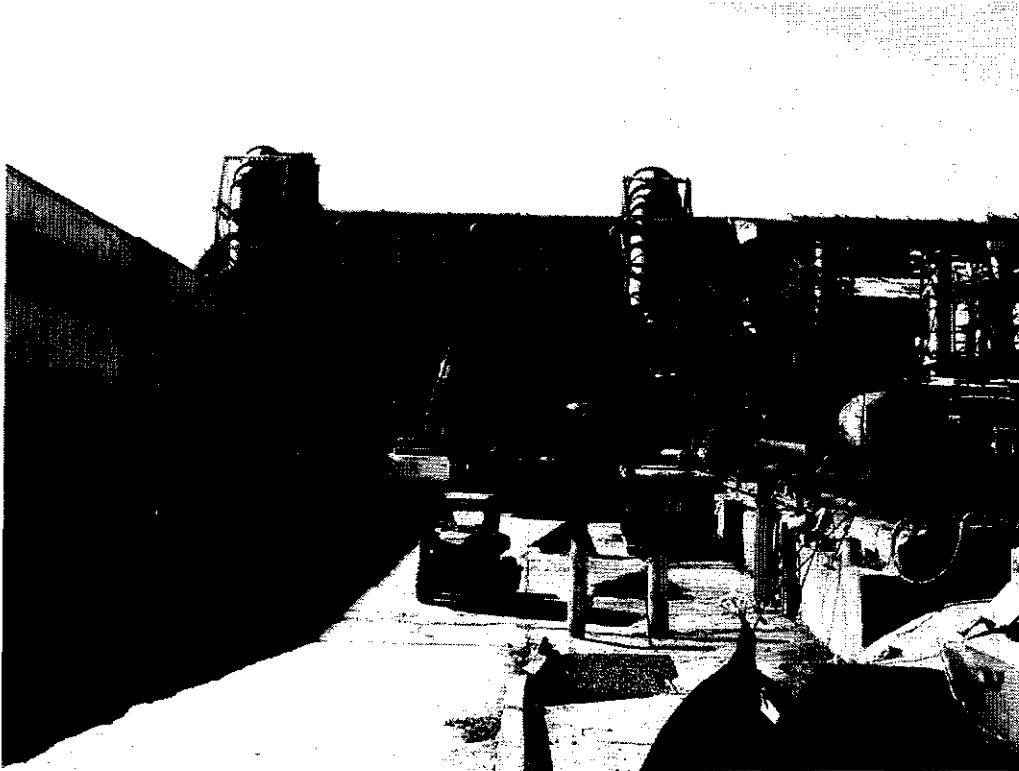
Date: 10/14/2010
Time: 2:00 – 3:45
Direction: West
Photo by: Chris
Cahnovsky
Exposure #: 011
Comments: RCRA
waste from AAF



Date: 10/14/2010
Time: 2:00 – 3:45
Direction: Northwest
Photo by: Chris
Cahnovsky
Exposure #: 012
Comments: AAF
Demolition



DIGITAL PHOTOGRAPHS File Names: 1198010003 ~ 1042010-[Exp. #001-014].jpg



Date: 10/14/2010
Time: 2:00 – 3:45
Direction: West
Photo by: Chris
Cahnovsky
Exposure #: 013
Comments: AAF
Demolition



Date: 10/14/2010
Time: 2:00 – 3:45
Direction: East
Photo by: Chris
Cahnovsky
Exposure #: 014
Comments: Waste
waiting to be lab
packed